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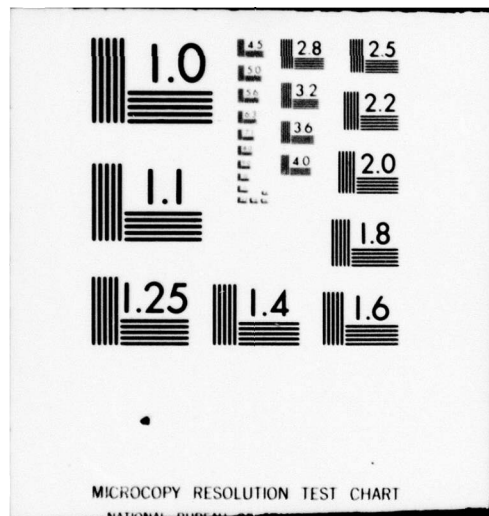
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Some Issues in Comparing

Women and Men as Leaders \*

Edwin P. Hollander — Jan Yoder

State University of New York at Buffalo

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## Some Issues in Comparing Women and Men as Leaders

Edwin P. Hollander and Jan Yoder

State University of New York at Buffalo

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In everyday experience, the words "woman" or "man" tend to produce conventionalized images and impressions about a person. While these are relatively stable attitudes, they are also affected by the role demands of situations. If, for instance, the incumbent of a leadership role is a woman rather than a man, then the differential perception may be heightened. Furthermore, if the group or organization is mixed in its sex composition, additional differences may be perceived by those who are followers, depending upon their sex-linked expectations.

From a review of pertinent literature, this paper analyzes a number of factors which may account for differences noted regarding female and male leaders of mixed-sex groups. Granted that there are contrasts in the way followers of both sexes react to female or male leaders, it now appears that much depends also on such factors as the nature of the group task, the attitudes about appropriate sex-roles held by the leader and followers, and the kind of criterion measures used.

### Background

For a long time, the study of leadership was largely built on research with men, sometimes with women, and much less often with both. Since most of the research on leadership has been done with all-male groups, leaders who have been studied are predominantly male and there are well-developed stereotypes about the leader role as a male domain (McGregor, 1967; Lockheed, 1977).

Although there is a conventional view that women and men differ in their social behavior, and some evidence does exist to make that case (cf. Deaux, 1976), the foundation for this difference is highly variable. The first kind of data comes from investigations of sex role stereotypes when individuals have not had any interaction with those being evaluated. For example, McKee and Sherriffs (1957) found that males were more favorably evaluated than females on a variety of measures by both males and females. Heilbrun (1968) examined differences in instrumental and expressive behaviors of males and females and found that females were rated more expressive than instrumental in their behavior by both males and females; on the other hand, males were rated as being expressive and instrumental by both males and females. This divergent effect also has been noted in the more recent work of Broverman, et al. (1972).

The second area of investigation of male-female differences has looked at differences when subjects have been in an interactive situation. These situations have included dyads, triads, and larger groups. Some of these studies have been concerned with same-sex groups while others have investigated differences in mixed-sex groups. Experiments such as those by Bond and Vinacke (1961) and Strodbeck and Mann (1956) have found male performance to be exploitative and competitive, and female performance to be more accommodative and tension-reducing. Although these results conform to Bales' and Slater's (1955) long-standing distinction between the task-role, associated with the father, and the socio-emotional role, associated with the mother, they are by no means conclusive. The existence of such gender differences is not in itself an indication of a predetermined quality of masculinity and femininity (cf. Heine, 1971). We propose that gender distinctions in leader behavior are a function of role expectations, style, and situational characteristics.

### Leadership Role

One clear effect of the factor of role expectations is that women as leaders of mixed-sex groups may need to be occupied as much <sup>with</sup> overcoming negative attitudes as with performing their job effectively. A woman may therefore be occupied with the extra handicap of showing that she can manage the role. Accordingly, the observed differences between female and male leaders are likely to be laden with the effects of social learning and societal expectations, including the self-concept acquired as a female or a male.

It is no wonder then that in mixed-sex groups women are less likely to be chosen as leaders, and <sup>are</sup> less inclined to see themselves as leaders or seek that role (Eskilson & Wiley, 1976). Viewed in the larger perspective, there are undoubtedly sex-role expectations underlying these results. In fact, the stereotypic distinction between the mother and father roles in the family, noted earlier, can play a part in producing the usual findings. This is no accident because the stereotype of the father as the task specialist and mother as supporter is still relatively entrenched. Experimenters and subjects alike are affected by it, despite the obvious fact that mothers perform tasks, and give direction, just as fathers can be emotionally supportive.

Nevertheless, as already indicated, there is much research evidence that directly supports or implies that people generally expect the leader role to be filled by a man. For instance, in a study by Schein (1973), male middle managers rated women in general, men in general, or successful middle managers on their general characteristics, attitudes, and temperaments. On 60 of these 86 items, men and managers were similarly rated, while on only eight items were women rated as being similar to successful middle managers. Another study, by Megargee (1969), showed further that, regardless of the dominance of the woman, she is unlikely to become leader when a man is available. Finally,

Eskilson and Wiley (1976) found that female leaders were less likely to choose themselves as the future leader of the group than were men. In sum, both women and men more often expect a leader to be a man (Lockheed, 1977).

For women, a basic concern exists about whether or not the leadership role itself is appropriate. Although an ineffectual male leader may have to cope with a stronger sense of failure since he mismanaged his given role than would a failing woman (Jacobson & Effertz, 1974), a successful female leader must cope with the fact that societal attitudes do not favor her successes in this role. Hence, women, unlike men, must cope with the fact that success with the leadership role is not valued, both by others (Bass, Krusell, & Alexander, 1971; Rosen, Jerdee, & Prestwich, 1975) and by themselves because of possible role conflicts (O'Leary, 1974).

#### Leadership Style

Leadership style refers to the personality characteristics of the leader which are most typical across situations. Observations of female leadership styles by Kanter (1977) led her to conclude that individual differences are more noteworthy than gender differences. On the other hand, Deaux (1976) suggests that while women and men are equivalent in their need for achievement, men seek to succeed more on tasks while women seek to achieve interpersonal successes. Also, in the research by Eskilson and Wiley (1976), women were found to exert more activity directed toward creating positive group affect than did men. Men, on the other hand, concentrated more than women on exhibiting recognizable leader behaviors. Vinacke (1969) contends that, when allocating resources, women focus on maintaining harmonious relations while men concentrate on the quality of an individual's performance. Relatedly, Leventhal (1973) argues that men value task performance and women stress affiliative goals. Yet, if Fiedler's (1965) least-preferred co-worker (LPC) scale is a differentiator of the task-oriented

leader (low LPC) from the socio-emotional leader (high LPC), it is surprising to discover a report of no significant difference in the mean LPC scores of men and women (Chapman, 1975).

Denmark (1977) has recently concluded that, "Many of the assumptions that women managers are basically different from men are just not supported by data. The one difference investigators generally agree upon is women's greater concern for relationships among people; this should be considered a plus in terms of leadership effectiveness. Alleged sex differences in ability, attitudes, and personality have been based on sex-role stereotypes, rather than empirical observations of women leaders" (pp. 110-111).

There is, however, an acknowledged problem when the style and demands of a role are in conflict. In an experiment mentioned earlier, Megargee (1969) examined this issue. He paired men and women who scored either high or low in dominance and then asked each of the four pairs to select a leader. In the case of a high dominance woman paired with a low dominance man, a component of leadership style--dominance--predicts that the woman will become leader. In contrast, the leadership role demands a male leader. When this pair was actually asked to select a leader, the woman was most likely to make the decision, more frequently than in any other pair. Most notably, in 91% of the cases, she appointed the man as the leader. Thus, even when a woman's leadership style conforms to role prescriptions regarding leadership, she may defer to the role demands and avoid leadership behavior.

#### Situational Influences

There is evidence to indicate that several situational factors can still operate to prevent women who have overcome role conflicts from exhibiting leadership behaviors. Under other conditions, these factors can facilitate the reduction of role conflicts so that women become leaders. A review of the

literature indicates that the sex composition of the group, the type of task employed, and how the leader attains his or her status are the most important situational factors.

If one views leadership as a transactional process, leaders both influence and are influenced by their followers (Hollander, 1978). Therefore, the sex composition of the group is an important variable; it will affect measures not only by itself, but also in an interaction with the sex of the leader. For instance, regarding the former proposition, group composition has been shown to influence disclosure and risk-taking patterns. All-female groups disclose more about "people other than self" and "self and feelings" than mixed-sex groups (Kraft & Vraa, 1975). In both individual and group conditions, all-female groups were most cautious, mixed-sex groups exhibited intermediate caution, and all-male groups were most likely to take risks (Bauer & Turner, 1974).

Group composition has also been shown to be an important variable as it interacts with the sex of the leader. Female leaders were equally effective and leader-like in performance leading two men, two women, or a mixed-sex group. However, male leaders exhibited the most leader-like behavior and highest performance output when leading two men, and least with a mixed-sex group. Male leaders' effectiveness was not affected by group composition (Eskilson & Wiley, 1976). Yerby (1975), who studied only females as leaders, reported that a mixed-sex group of two males and two females was most satisfied with the group while an all-male group led by a woman was least satisfied. Groups with same-sex leaders reported a better group atmosphere than groups led by opposite-sex leaders, but no differences were found in productivity (Boullard & Cook, 1975). In sum, the evidence clearly indicates that an important independent variable in studying leadership is the sex composition of the group.

Another variable, which seems to have been largely ignored in the research and commentary on leadership, is the sex-typing of the task. If a task is perceived to be either masculine or feminine, it is likely to influence how men and women respond to it (Makosky, 1972). For example, women conformed more than did men on items viewed as stereotypically masculine, but conformed as much as or less than did men on neutral and stereotypically feminine items (Sistrunk & McDavid, 1971). Maier's (1970) role-playing paradigm in which women play Gus, the foreman, Jack, Walt, and Steve, working on a job assembling fuel pumps, is a case in point. It is unlikely that a woman would find it appealing to play Gus and to work on a task involving the assemblage of gas pumps. Despite this incongruity, this method has been used repeatedly (Sashkin & Maier, 1971; Yerby, 1975). Eagly (1970) also had women playing Mr. O'Brien, the social worker, in the Johnny Rocco case. Future research should manipulate this variable by studying leaders' performance with favorably and unfavorably sex-typed tasks or, at least, neutralize this variable's effects by employing tasks which are not sex-biased.

Although men have consistently been shown to be better at spatial tasks than women (Maccoby, 1966), both Lockheed (1977) and Eskilson and Wiley (1976) utilized tasks requiring these skills. This is certainly likely to stack the deck. Indeed, Desaux (1976) has said that the choice of a task itself creates the potential for a sex bias to occur. Future research ought to consider this variable by studying leaders' performance with favorably and unfavorably sex-typed tasks, or, at least, try to neutralize their effects by employing non-sex-specific tasks, such as the signal detection task reported by Clement and Schiereck (1973).

There also needs to be a recognition that the criterion measures for leadership performance vary considerably. Researchers studying leadership processes

have used a great many criteria to look at the effects of sex of leader. They have measured the leader's and followers' satisfaction with the group, followers' reactions to the leader, the productivity or effectiveness of the group on some objectively-evaluated task, the individual's and the group's tendency to take risks, disclosure patterns, leader influence, and the leader's performance of task-relevant acts. All of these are in some way affected by sex role attitudes toward leadership because sex biases in varying degrees reside in these measures themselves.

When group members are engaged in a task with an objectively measured task goal, success or failure in achieving that goal becomes important and may influence perceptions of female and male leaders. For example, Jacobson and Effertz (1974) found that both male and female followers evaluated a failing male leader more harshly than an equally ineffective woman. When devising a task for the study of leadership, it is important to consider the perceived sex-typing associated with that task as well as the experience of success or failure it may generate.

Relatedly, it is also important to note the effects on the performance of female and male leaders associated with being appointed or emerging as a leader (cf. Denmark, 1977). In one study, women who thought that they had become the leader because they exhibited task-relevant skills demonstrated greater performance output and acted more leader-like than women who had been randomly appointed (Eskilson & Wiley, 1976). In contrast, male leaders were not found to be affected by the apparent process that led to their attainment of the leader role. Reinforcing a woman's perceptions of her leadership capabilities by pointing to her competency with the task may legitimize leadership behavior for her that

otherwise violated her sex-typed stereotype of the leadership role.

One problem in studying appointed or emergent leadership is the constraint that women emerge as leaders in an election less often than do men in mixed-sex groups. An exemplification of this is seen in the research of Fallon and Hollander (1976) in which groups composed of two women and two men could elect a leader at the outset. There was a clear tilt in favor of males being elected more often than females.

#### Sex Role Attitudes

The sex-role attitudes of both the leader and followers represents a noteworthy variable affecting outcomes. Two studies dealing with this variable operationalized it as attitudes toward female leadership (Yerby, 1975) and field-dependency (Lockheed, 1977). The latter found that field-dependent men were more active and influential in field-dependent groups than women, while no sex differences existed for field-independent leaders of field-independent groups. Yerby's (1975) results indicated that a woman fares better leading a group of hostile men than an all-male group with positive attitudes toward females as leaders. Although surprising, the latter group reported the least satisfaction with the female leader. Mixed-sex groups with positive attitudes were found to be the ones most receptive to the female leader. In addition, liberal sex-role attitudes were associated with a greater tolerance for disagreement within the group (Yerby, 1975). Although these studies yield important initial results regarding this variable as a moderator, leader and follower attitudes are confounded. What would happen, for example, if a field-independent woman led a field-dependent group? Sex-role attitudes of followers and the leader should be combined factorially in future research.

### Leadership Effectiveness

Leadership behavior has been operationally defined in many ways. A review of the literature shows that researchers studying leadership processes have measured leader's and followers' satisfaction (Bartol & Wortman, 1976; Maier, 1970; Yerby, 1975), followers' reactions to the leader (Bartol, 1974; Day & Stogdill, 1975), the productivity or effectiveness of the group on some objectively evaluated task (Boullard & Cook, 1975; Eagly, 1970), the individual's and the group's risk-taking (Bauer & Turner, 1974), disclosure patterns (Aries, 1976; Kraft & Vraa, 1975), leader influence (Eskilson & Wiley, 1976; Maier, 1970), and the leader's performance of task-relevant acts (Eskilson & Wiley, 1976). One difficulty in reviewing this body of research is created by the diversity of dependent measures employed. It is risky and confusing to compare findings of one study with those of another study that used different measures. In addition, the use of one measure (e.g., group satisfaction) may bias the results in favor of women while another measure (e.g., task effectiveness) may produce results that favor men. The obvious solution to this problem is the use of multiple criterion measures.

The measures listed above appear to fit two categories of leadership behavior that earlier research has defined: consideration and initiating structure (Halpin & Winer, 1957). The first factor, consideration, deals with the establishment and maintenance of a positive group climate. The latter factor, initiating structure, measures those aspects of the leader's behavior dealing with goal setting and attainment. As Hollander (1978) points out, these factors are not opposites, but are both indicative of effective leader behavior. The use of these two general measures in future research would help to define the concept of leader behavior in richer terms and make the results of several programs of research more comparable.

We come now to the basic issue which often is at the core of comparisons between women and men in leadership roles: Are women and men equally or more effective as leaders? The psychological literature seemingly provides us with contradictory answers to this question, for some of the reasons already delineated. Studies show that women played a less dominant role when a task was unstructured than when it was structured (Maier, 1970), male leaders exhibited more leader-like behaviors than did their female counterparts (Eskilson & Wiley, 1976), and field-dependent women were less active and influential than men (Lockheed, 1977). On the other hand, studies using self-ratings of leadership (Bartol & Wortman, 1976) and subordinates' descriptions (Bartol, 1974; Day & Stogdill, 1972) indicate that there may be few job-related differences between female and male leaders.

Essentially, there appear to be two distinct approaches to answering this question concerning differences between men and women as leaders: (1) assign women and men the role of leader, keeping various extraneous factors constant, and compare the leader's and group's effectiveness; or (2) examine the leader's and group's reactions to actual leaders, such as male and female managers, teachers, military cadets, and so on. The former procedure addresses the question of whether women, in general, can be as effective as male leaders. The second method asks if women who chose to be leaders are as effective as men who also chose leadership roles.

These two approaches characterize the two sets of conflicting research results previously discussed. Research supporting gender differences in leadership behavior sampled the general population of women, while studies finding no gender-related differences in leadership behaviors sampled the population of actual female leaders.

What causes some women to choose to be leaders and to lead effectively while other women are apparently less successful? We have proposed that leadership role, style, and situational characteristics are the relevant factors, and that they influence the leadership behavior expressed by or inhibited in women and men in ways which are clearly complex and highly interactive. In further work, personality characteristics that define leadership style need to be more closely identified. Situational variables and sex-role attitudes of leaders and followers must be considered by future researchers. The effects of these factors on the leadership behaviors exhibited by all women and men leaders must be explored, especially in regard to effectiveness, which itself needs attention regarding appropriate criteria.

References

- Aries, E. Interaction patterns and themes of male, female, and mixed groups. Small Group Behavior, 1976, 7, 7-18.
- Bales, R. F., and Slater, P. E. Role differentiation in small decision-making groups. In T. Parsons, et al. (Eds.), Family, Socialization, and Interaction Process. Glencoe, Ill.: Free Press, 1955.
- Bartol, K. M. Male versus female leaders: The effect of leader need for dominance on follower satisfaction. Academy of Management Journal, 1974, 17, 225-233.
- Bartol, K. M., and Wortman, M. S. Sex effects in leader behavior self-descriptions and job satisfaction. Journal of Psychology, 1976, 94, 177-183.
- Bass, B. M., Krusell, J., and Alexander, R. H. Male manager's attitudes toward working women. American Behavioral Scientist, 1971, 15, 77-83.
- Bauer, R. H., and Turner, J. H. Betting behavior in sexually homogeneous and heterogeneous groups. Psychological Reports, 1974, 34, 251-258.
- Bond, J. R., and Vinacke, W. E. Coalitions in mixed-sex triads. Sociometry, 1961, 24, 61-75.
- Boullard, P. D., and Cook, P. E. Sex and workstyle of leaders and followers: Determinants of productivity. Psychological Reports, 1975, 36, 545-546.
- Broverman, I., Vogel, S. R., Broverman, D. M., Clarkson, F. E., and Rosenkrantz, P. S. Sex-role stereotypes: A current appraisal. Journal of Social Issues, 1972, 28, 59-78.
- Chapman, J. B. Comparison of male and female leadership styles. Academy of Management Journal, 1975, 18, 645-650.
- Clement, D. E., and Schiereck, J. J. Sex composition and group performance in a visual signal detection task. Memory and Cognition, 1973, 1, 251-255.

- Day, D. R., and Stogdill, R. M. Leader behavior of male and female supervisors: A comparative study. Personnel Psychology, 1972, 25, 353-360.
- Deaux, K. The Behavior of Women and Men. Monterey, Calif.: Brooks/Cole, 1976.
- Denmark, F. L. Styles of leadership. Psychology of Women Quarterly, 1977, 2 (2), 99-113.
- Eagly, A. H. Leadership style and role differentiation as determinants of group effectiveness. Journal of Personality, 1970, 38, 509-524.
- Ekilson, A., and Wiley, M. G. Sex composition and leadership in small groups. Sociometry, 1976, 39, 183-194.
- Fallon, B. J., and Hollander, E. P. Sex-role stereotyping in leadership: A study of undergraduate discussion groups. Paper presented at the American Psychological Association Convention, 1976.
- Fiedler, F. E. The contingency model: A theory of leadership effectiveness. In H. Proshansky and B. Seidenberg (Eds.), Basic Studies in Social Psychology. New York: Holt, Rinehart & Winston, 1965.
- Halpin, A. W., and Winer, B. J. A factorial study of the leader behavior descriptions. In R. M. Stogdill and A. E. Coons (Eds.), Leader Behavior: Its Description and Measurement. Columbus: Ohio State University, Bureau of Business Research, 1957.
- Heine, P. J. Personality in Social Theory. Chicago: Aldine, 1971.
- Heilbrun, A. B., Jr. Influence of observer and target sex judgments of sex-typed attributes. Perceptual and Motor Skills, 1968, 27, 1194.
- Hollander, E. P. Leadership Dynamics: A Practical Guide to Effective Relationships. New York: Free Press/Macmillan, 1978.
- Jacobson, M. B., and Effertz, J. Sex roles and leadership perceptions of the leaders and the led. Organizational Behavior and Human Performance, 1974, 12, 383-396.
- Kanter, R. M. Men and Women of the Corporation. New York: Basic Books, 1977.
- Kraft, L. W., and Vraa, C. W. Sex composition of groups and pattern of self-disclosure by high school females. Psychological Reports, 1975, 37, 733-734.

- Leventhal, G. S. Reward allocation by males and females. Paper presented at the American Psychological Association Convention, 1973.
- Lockheed, M. E. Cognitive style effects on sex status in student work groups. Journal of Educational Psychology, 1977, 69, 158-165.
- Maccoby, E. E. Sex differences in intellectual functioning. In E. E. Maccoby (Ed.), The Development of Sex Differences. Stanford, Calif.: Stanford University Press, 1966.
- Maier, N. R. Male versus female discussion leaders. Personnel Psychology, 1970, 23, 455-461.
- Makosky, V. P. Fear of success, sex-role orientation of the task, and competitive conditions as variables affecting women's performance in achievement-oriented situations. Paper presented at the Annual Meeting of the Midwestern Psychological Association Convention, 1972.
- McGregor, D. The Professional Manager. New York: McGraw-Hill, 1967.
- McKee, J. P., and Sherriffs, A. C. The differential evaluation of males and females. Journal of Personality, 1957, 25, 356-371.
- Megargee, E. I. Influence of sex roles on the manifestation of leadership. Journal of Applied Psychology, 1969, 53, 377-382.
- O'Leary, V. E. Some attitudinal barriers to occupational aspiration in women. Psychological Bulletin, 1974, 81, 809-826.
- Rosen, B., Jerdee, T. H., and Prestwich, T. L. Dual-career marital adjustment: Potential effects of discriminatory managerial attitudes. Journal of Marriage and the Family, 1975, 37, 565-572.
- Sashkin, M., and Maier, N. R. Sex effects in delegation. Personnel Psychology, 1971, 24, 471-476.

- Schein, V. E. Relationship between sex role stereotypes and requisite management characteristics. Journal of Applied Psychology, 1973, 57, 95-100.
- Sistrunk, F., and McDavid, J. W. Sex variable in conforming behavior. Journal of Personality and Social Psychology, 1971, 17, 200-207.
- Strodtbeck, F. L., and Mann, R. D. Sex role differentiation in jury deliberations. Sociometry, 1956, 19, 3-11.
- Vinacke, W. E. Variables in experimental games: Toward a field theory. Psychological Bulletin, 1969, 71, 293-318.
- Yerby, J. Attitude, task, and sex composition as variables affecting female leadership in small problem-solving groups. Speech Monographs, 1975, 42, 160-168.

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